LEARNING-STYLE PREFERENCE OF ESL STUDENTS

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Abstract
Students' learning styles have been ignored and have been considered as an insigniÞcant component in the learning process (Rita Dunn, 1993). Dunn said that lecturers cannot identify student's styles without using a multidimensional instrument. Lecturers are not aware of their own learning styles and their learning style preferences may differ from that of their students. As such, they are unable to assess students' learning styles without administering proper learning styles inventory. Since little attention has been paid to how learners learn and how teachers teach in many institutions, this research attempts to determine the learning styles of the students, and the differences in their learning styles according to gender and ethnicity. This research also aims is to determine the Perceptual Learning Style (PLS) of ESL students and to analyse differences in learning styles regarding student's demographic factors such as gender and race. In this research, the PLS preferences of ESL students was assessed using the PLSPQ research instrument, which Peacock (2001) reported to be of high reliability. In order to familiarise the readers with the larger picture in determining learning styles, some other relevant research instruments are summarised. One hundred and sixty (N=160) students from UNITEN were selected as respondents using the stratiÞed random sampling techniques. Seventy-four female students (46.3%) and eighty-six male students (53.8%) participated in the research. The racial composition of the samples was 56 Malays (35.0%), 52 Chinese (32.5%) and 52 Indian (32.5%). Results revealed that the dominant learning styles of ESL students yielded the following results. In general, students preferred the Kinaesthetic learning style and expressed minor preference for Visual, Auditory, and Group Learning,

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Introduction

Learning is "the process whereby knowledge is created through the transformation of experience", (Kolb, 1984: 38). Learning is determined by learning styles (LS) where students who are able to employ multiple learning styles acquire a greater learning outcome.(Claxton and Murell 1985; Elison 1995; Felder 1995; Reid 1987). Since learning styles play a crucial role in the learning process, lecturers should not neglect the importance of choosing the appropriate teaching method. Once lecturers become aware that students learn differently they will determine students'LS and try to accommodate for them. According to Felder (1996), the amount students learn in the class is partially determined by the students' ability and prior preparation, the capability of his or her learning style, and the lecturers teaching style. Many researchers have stated that effective teaching is the main predictor of student success. In the past, most educators advocated that students, not teachers, were the central factor in academic success, and many argued that teachers played a great role in students' academic performances.

Learning a language is among the most challenging lifelong pursuits to undertake. Such a lifelong learning process involves professional and educational guidance and mindful engagements in any language and speciÞcally the English language. Consequently, this study is driven by the curiosity of the researchers to identify students' perceptual learning styles (PLS) and Þnd out the extent to

which they are effective in an ESL context.

Perceptual Learning Styles of ESL Students

The contemporary practices in education are very often idealised from the administrative and pedagogical perspectives. However, when one looks deeply into the teaching practices of the lecturers, it is possible to infer that the majority of the lecturers are not aware of their students' learning styles. Students' learning styles have been ignored and have been considered an insignificant component in the learning process. Dunn (1993) holds that teachers cannot identify students' styles without using a multidimensional instrument. Without evaluation, even experienced teachers may misinterpret students' behaviours as hyperactivity or inattentiveness. Hence, the need to assess the learning styles of students becomes obvious in order to accommodate different learners.

Lecturers may not be aware of their own learning styles, or that their learning style preferences may differ from those of their students. They cannot assess the learning styles of the students without administering a proper learning styles inventory. This research aims to determine the Perceptual Learning Style (PLS) of ESL students and to analyse the differences in learning styles regarding student's demographic factors such as gender and race. This research hopes to shed some light on and provide meaningful suggestions to overcome the problems that may arise with regards to the learning styles of students in ESL classrooms.

The Importance of Determining Students Learning Style

In order to realise the importance in determining students' learning styles, and also to accommodate for different learning styles in the classrooms, students should complete a learning style instrument early in the course. This would enable students to realise their own learning style as well as those of their classmates. Lecturers should be aware that students learn differently, which should make them aware that they have to

approach teaching from different perspectives. Nelson et al. (1993) concluded in their research that students who completed learning instrument at the beginning of the course achieved better grades at the end, and students who participated in learning style workshops attended universities in larger percentages than those who did not participate in the workshops.

Teaching and learning styles should be of the greatest interest to educators, particularly the relationship between the two. However, one of the weaknesses of learning style research is the lack of investigation into the matching of teaching and learning styles. Theoretically, many variables exist in educational literature reviews, but very few researchers deal with the matching of teaching and learning styles. Peacock (2001) is one of the significant and influential researchers who investigated the matching of teaching and learning styles in real settings. He concluded that serious disparities exist between the LS of the students and the teaching styles of the lecturers. Matching teaching and learning in the classroom means that instructors should try to accommodate the different learning styles of students. Some researchers investigated teachers as well as administrators in the schools, as the two are closely related, interdependent, and influence students' success. Adaptability to different learning styles plays a key role in students' academic achievement.

Researchers who investigated the teaching styles of the lecturers affirmed that the lecturers could influence students' achievement by employing different ways of presenting the information. Such studies have indicated the need to match the teaching styles of the lecturers and the learning styles of students in order to increase competency in both teaching and learning. In order to satisfy expectations, teachers tend to shift from their natural teaching practices to the practices the administration expects of them. Teaching and learning are active processes that go hand in hand, while lecturers and learners are interdependent of one another. If this concept is realised, teachers would be able to enhance their effectiveness and enable students to achieve

their full potential (Forest, 2004). Investigation into the teaching styles asserts that the disparity between teaching and learning is continuous, and that this largely influences students' attitude and motivation.

Disparity in teaching and learning styles is the root of the problems that many students face. According to a few researches, lecturers have been neglecting the cornerstone of why students fail, resist, or refuse to learn. Although the lecturers' actions may be unintentional, lecturers have to start looking into the main causes for the students' failure, resistance, and refusal in order to avoid such occurrences. Students who are unable to achieve in the way that is expected become less motivated and less persistent. Investigation into what works best for each student is unavoidable, and consequently, carrying out the findings of the investigations will lead to students' success.

Designing course material based upon the students' preference towards certain learning styles would enable students to overcome difficulties that may arise when facing problems related to the learning styles. Once students' learning styles are determined, lecturers will have a clear picture of how to design the courses. When designing a course, educators must pay attention to students' needs. In the ESL context, lecturers should use a variety of new materials to which students can relate in terms of their personal experiences. Lecturers should make use of visual aids such as photographs, drawings, sketches, and cartoons to illustrate and reinforce meaning of the new vocabulary. In order to illustrate textual lessons, lecturers should show films and live dramatisation. This approach will assist visual learners and motivate them.

In order to reinforce the learning of grammar and vocabulary, lecturers should assign some repetitive drills and exercises. Lecturers should not always lecture and write upon the board, but they should allow students to think about what they have been told and allow students be involved in class activities and hands-on exercises. This will enable students who are prone to kinesthetic or tactile learning to learn and acquire the English language without less difficulty. Lecturers should give students the option of cooperating on some homework assignments. Group learners learn best when they work with a few of their classmates. This will give them the opportunity to express themselves in the area they learn best. Likewise, lecturers should facilitate those students who learn best on their own. They should assign individual home exercises or individual in-class grammar exercises.

Learning Styles, Ethnicity, and Gender

Ethnicity and gender play a crucial role in students' learning styles. Therefore, lecturers must be aware of the diverse ethnic composition in their classroom. This is particularly important in the societies prone to diverse ethnic compositions, as is the case of Malaysia. Students from different ethnic backgrounds approach learning differently, and this is proven by many researches. This veracity must be made clear among educators when teaching. They must diversify their teaching styles to suit students from different ethnic backgrounds. Gender is also a factor that determines students' learning styles. The result of this study revealed that Female students revealed learning style preferences that have association with feelings, and they are more reflective, field-sensitive, and subjective than males. Male students exposed learning style preferences towards field-independency, and they were objective and analytically minded in processing the language.

Theoretical Framework

Behavioural theory, whose main proponent is Skinner (1980), deals with the observable changes in behaviours and the reinforcement of such desired behaviours. This theory is applicable to this research because it deals with observable changes in behaviour. According to this theory, students are able to learn best when being rewarded the 'right responses'. Such responses in educational literature are known

as 'operant conditioning'. This theory advocates students' learning process through replication of certain learning behavioural patterns based on tangible rewards or punishments. For instance, these rewards can be associated with merit marks, various forms of academic approvals, and special privileges. The educators should emphasise high-level positive reinforcement in the class and use materials that are high in structure through which students can gradually work towards better educational achievement.

Since behavioural theory emphasises behaviour and neglects, to a certain extent, cognitive aspects of learning, psychologists began to emphasise cognition rather than behaviour. The cognitive theory of learning, originated by Jean Piaget (1971), is based on the assumption that information should be acquired and retained for use in the future if learning is to become learner-constructed, relevant, and built upon prior knowledge. Cognitive learning is often organised in chunks and is built in the memory of the learner, enabling learners to use such information in the future. Cognitive models give learners control by introducing conceptual framework and relying on the learner to build connections. Piaget describes knowledge by emphasising the concepts of assimilation and accommodation. Assimilation is the process by which the learner incorporates the logic of his/her own development and existing understanding, or interpretative category, into the meaningful whole. Accommodation refers to the process by which human beings adapt their developing understanding and expectations to the realities and constrains of the social and physical world in order to arrive at better understanding and explanations (Miller, 1993). In this regard, educators must actively involve students in the process of learning. Therefore, Grasha (1996) warns, "Tasks that provide variety and novelty will capture students' attention better, but care must be taken not to overload the cognitive system with too much information" (p. 121).

As an alternative to the former theories of learning, constructivist theory, predominantly propagated by Bruner (1990), asserts that learners do not simply absorb and store information, but they make active interpretations of experiences and draw sound independent conclusions. Thus, students from an early age develop an active and independent learning attitude, and construct knowledge rather than receive it. Unlike the cognitive approach to learning, the constructivist approach is more concerned with how students use, receive, construct, or deconstruct knowledge (Miller, 1993).

Research Methodology

The current research was conducted at the Department of Language and Communication, Universiti Tenaga Nasional (UNITEN). English for Academic Purposes (ENGF103) was the specific subject examined in this research. This course is designed to develop students' skills in academic reading, public speaking, and critical thinking. Students are encouraged to master academic writing skills, which needed them to do research and to organise information. This course is specifically designed for students who need to improve their skills in academic writing and reading. The main objectives of the course are to review grammatical structures and writing skills, and introduce work related topics such as report writing, memorandums, letters, proposals, oral reports, and job applications. English for Academic Purposes is a compulsory subject for all students.

The sample of students for this research was taken from the Department of Language and Communication who took English for Academic Purposes (ENGF 103) for two semesters from December–April 2005/2006. There were 540 students who took this course, and their ages ranged from 17 to 19. The research sample was selected based upon stratified sampling. Stratified sampling divides the population into homogenous subgroups. Subjects are then selected from each subgroup using simple random or systematic procedures (McMillan 2000). The reason for choosing this method in selecting the sample for this research was the desire to have a general representation of the population.

In this research, the PLS preferences of ESL students was assessed using the PLSPQ research instrument, which Peacock (2001) reported to be of high reliability. One hundred and sixty (N=160) students the English Language Department from UNITEN were selected as respondents in this research using the stratified random sampling techniques. Seventy-four female students (46.3%)

and eighty-six male students (53.8%) participated in the research. The racial composition of the samples was 56 Malays (35.0%), 52 Chinese (32.5%), and 52 Indian (32.5%).

Perceptual Learning Style Preference Questionnaire (PLSPQ)

Joy Reid (1987) developed the PLSPQ particularly for learners of foreign languages. The questionnaire assesses preferred learning styles of students based upon how students learn best using their perceptions: visual, auditory, kinesthetic, and tactile preferences, and two social aspects of learning: group and individual preferences. There are several reasons for choosing this instrument. It is easy to administer, easy to interpret, self-scoring and not scored by an external agent, relatively quick to administer and complete, it has easily reportable scales, and has reliability and validity supported by the research. PLSPQ consists of 30 self-report questions. Subjects are expected to indicate how much they agree with each item on a scale from one to five. Each number notes a certain measurement such as: (5) strongly agree, (4) agree, (3) undecided, (2) disagree, and (1) strongly disagree.

Results and Discussion

To interpret the level of the mean scores, the researchers used the indicator below.

13.5 and above = major learning style preference
11.5 to 13.49 = minor learning style preference
11.49 or less = negative learning style preferences

The researchers compared the present study with two previous studies by Reid (1987) and Melton (1990). As observed, the results of the present study (13.60) are consistent with Reid's study (14.62), where students preferred the Kinesthetic Style. According to the mean score for each learning style, students in this study favoured the Kinesthetic LS. Their minor learning style preferences were Visual (12.00), Auditory (12.53), and Group (12.42) learning styles, while they had negative preferences towards Individual (11.06) and Tactile (11.25) learning styles. Previous studies of perceptual learning styles reported that students have preferences towards Kinesthetic and

Tactile learning, and disfavour Group style. Reid (1987) reported that Chinese university students favoured Kinesthetic and Tactile and disfavoured Group style. Melton (1990) reported that Chinese university students favoured Kinesthetic, Tactile, and Individual styles and disfavoured Group styles. In the study of Chu and Chew (1999), students favoured Kinesthetic and Tactile style, and they did not disfavour any style.

Table 1 : Learning Style Preferences : Mean Score in Two Previous Studies

Style	Reid	Melton	Present Study
Visual	13.55	12.16	12.00
Auditory	14.09	12.63	12.53
Kines-thetic	14.62	13.80	13.60
Tactile	14.52	14.33	11.25
Group	11.15	10.49	12.42
Individual	12.41	13.75	11.06

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Researchers have warned that the results of learning styles research cannot always be generalised because many factors may influence students' preferences towards particular learning style, such as educational background, ethnicity, gender, and motivation to learn.

The dominant learning styles of ESL students yielded the following results. Students preferred learning style was Kinaesthetic. They expressed minor preference for Visual, Auditory, and Group learning, while on the other hand students expressed negative preference towards Individual and tactile learning styles. as mentioned above. In order to accommodate different learning styles in the classroom, lecturers need to take into consideration a handful of concepts. For example, a visual learner prefers reading, observing, and more data for their interpretation, or more visual aids, such as movies, diagrams, pictures, graphs etc. However, kinesthetic learners prefer hands-on experience to create and develop what they learn. They learn best from trial and error experiences. Auditory students prefer listening to lectures and seminars, and participating in discussions. These

students like to listen to tape recordings of material and have a chance to ask questions about what they have learned or do not understand. Tactile learners prefer to learn with hands-on experience. Working in the laboratory on an experiment is the best way for them to learn. Writing notes in the class helps them remember the material that they have to learn.

In order to understand new information, students who adopt the tactile learning style have to be physically involved in class activities. Group-oriented learners acquire knowledge best when they study with one or more students in a group. Class interaction is a key for the success of these students. In order to remember information from the class, he/she has to work with one or more students. Stimulation received from the group interaction is the best way for these students to remember new information. Individual-oriented students learn best when alone. Information is easily acquired and best remembered if the student is left alone in a quiet environment to study or work on any project.

There was a significant difference between male and female students regarding Auditory and Kinesthetic learning styles. The mean score for male students was higher, 12.53 and 13.60 respectively in both cases, which means that male students favoured Kinesthetic and Auditory learning more than their female counterparts. This result concurs with the Dunn and Griggs (1993) study in which they found significant differences in the learning styles of Mexican- and Anglo-American students.

Differences in learning styles of ESL students among Malay, Chinese, and Indian students were also investigated. Significant differences were found in all the learning styles among students from the different ethnic backgrounds. Visual learning was the preferred way of learning for Indian students, a minor learning style preference for the Chinese students, and a negative learning style for the Malay students. Auditory learning was a major learning style for the Indian students, while it was a minor learning style for Chinese students. Malay students reported it as a negative learning style. Tactile learning was reported to be a negative learning style for the Malay, while Chinese and Indian students reported it as a minor learning style. Kinesthetic learning was reported

as a major learning style for Chinese and Malay students, while Indian students reported it as a minor learning style preference. Malay and Indian students reported group learning as minorlearning style, while Chinese students reported it as a major learning style preference. Finally, Individual learning was a minor learning style preference for Malay and Chinese students while Indian students expressed it as major learning style.

Conclusion

The results of the research suggest that it is important to determine students learning styles and make students aware of the different approaches to learning.. Determining the learning styles of students is vital, and there should be an effort from lecturers to accommodate those differences in the classroom. When the learning styles are determined, it is suggested that lecturers take into consideration the differences in learning styles among students when designing the course material. A variety of materials should be incorporated in language classrooms. Since the differences are established between students from different ethnic and gender backgrounds, those differences should be reconsidered when teaching foreign languages. Students are also advised to try to adjust to different learning circumstances in order to avoid any confrontations when exposed to learning styles that do not suit them.

Many factors influence students' achievement at all levels. Learning styles of the students are one of many factors that need to be considered when researching students' attitude and achievement. The results of the research has shown the importance in determining students' learning styles, and that differences do exist in learning styles among students from different ethnic backgrounds and students of different gender. The research suggests that students should be made aware of their learning style preferences. Students may take for granted that their learning styles are habitual. They may not even be aware of their learning styles or the styles of other students. The awareness of their learning styles may encourage them to realise the importance of learning styles and the crucial role they play in their learning. According to Pask (1976), knowing ones learning style is important. Conducting survey research is one of the ways to assess students' learning styles. It is important to

then make the results available to the students.

Further research into learning styles is recommended as this issue can be approached from many different perspectives. Reid's (1987) main hypothesis (that all students have their own learning styles, strengths, and weaknesses) should be explored further. Moreover, the research into gender and ethnicity differences in learning styles must be investigated to identify whether this difference is related to students' attitude and motivation towards learning a second language. Further investigation into teaching and learning styles and to what extent they relate, is highly recommended. The particular problem mentioned in the research regarding the PLSPQ and its inability to give concrete examples of the activities for each style, should be investigated, and some open-ended questions should be added to the questionnaire.

Research into learning and teaching style plays an important role in students' achievement and success in education. This is the why the researcher recommended further investigation into teaching and learning styles. Additional variables could also be investigated, such as learning styles of students among high-, medium-, and low-achievers, learning styles of the students and their motivation to learn, and how learning styles of the students and teaching styles of the lecturers relate.

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